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## The Saturn V Moon Rocket

When President John F. Kennedy in 1961 called for the Nation to put Americans on the Moon by the end of the decade, the Marshall Center was ready to answer the call. Huntsville had already earned the title “Rocket City.” But at the time of Kennedy’s challenge to the Nation, no rocket in the country could take a craft to the Moon’s surface. Von Braun answered Kennedy’s challenge by immediately turning his attention to the Saturn V.

The Saturn V represented a dramatic departure from early launch vehicles that were powered by only one engine and built as a single unit. To achieve the thrust necessary for crewed lunar missions, it was essential to develop a multi-engine launch vehicle that used higher performance propellants and propulsion systems.

The towering Saturn V was the response to that challenge. The first large vehicle in the U.S. space program to be conceived and developed for a specific purpose, the Saturn V was the most powerful vehicle ever designed. More than 3 million parts, making up 700,000 components, were contained in a single Saturn V. When complete, the 363-foot Saturn V stood 60 feet taller than the Statue of Liberty and weighed 13 times more. At liftoff, the

three-stage Saturn V had the power equal to the energy created by 85 Hoover Dams.

At the height of the Saturn program, as many as 20,000 contractor companies were involved in aspects of the program. From 1960 to 1964, existing test stands at Marshall were remodeled, and a sizable new test area was developed.

While Kennedy’s challenge to the Nation created a sense of urgency, quality and safety were never sacrificed. Components were tested and re-tested throughout the 1960’s, all leading up to the Apollo 11 lunar landing.

Finally, a short 8 years after Kennedy’s challenge to the Nation, the work by Marshall Center employees came to fruition. The Saturn V successfully propelled the Apollo 11 crew to the Moon’s surface. On July 20, 1969, mission Commander Neil Armstrong sent the message back to Earth: “Houston, Tranquility Base here. The Eagle has landed!”

Five successful Moon-landing missions boosted by Marshall’s Saturn V followed the Apollo 11 mission. The Apollo program was completed with the flight of Apollo 17 in December 1972.



*The 363-foot tall Saturn  
was first launched on  
November 20, 1967.  
A Saturn V was used on  
July 16, 1969, to send the  
first human to the lunar  
surface on Apollo 11.*